ofgem E-Serve Promoting choice and value for all gas and electricity customers

DEPARTMENT OF ENERGY & CLIMATE CHANGE

Joint Ofgem/DECC working group:

3rd Offshore Transmission Coordination Group Meeting

24 May 2011

Agenda

1. **Welcome**
2. **Project Update**
3. **Related Projects**
4. **Feedback from 2nd OTCG expert group**
5. **Commercial Perspectives:**
   - *An OFTO – Chris Veal*
   - *A Generator – Allan Kelly*
   - *Discussion*
6. **Wrap up**

DEPARTMENT OF ENERGY & CLIMATE CHANGE

2. Project Update

Project Update

- Actions from previous meeting have been undertaken/are being undertaken
  - Colleagues from DECC have been invited to update on related work
- Note of first workshop has been published and placed on the offshore transmission website
- Second workshop held on 6 May – outputs to be discussed today
- Consultants have been appointed by Ofgem to provide analysis for work streams
  - TNEI/PPA for asset delivery workstream
  - Redpoint for commercial/regulatory issues
- Work on asset delivery (work stream 2) is ongoing
  - Details on next workshop subject tbc, to be facilitated by consultants

DEPARTMENT OF ENERGY & CLIMATE CHANGE

3. Related Projects

Electricity Networks Strategy Group (ENSG)

- The ENSG was reconvened on 14 February 2011 and has agreed three workstreams:
  1. Update of ENSG 2020 Vision on where anticipatory investment might be required for onshore grid reinforcements in a published ENSG refresh report
  2. Assessment and monitoring of major onshore network delivery to 2020
  3. Scoping of post-2020 scenarios impacting on pre-2020 transmission network investment needs and on post-2020 investment and other transmission network solutions

- Timelines are subject to further work and approvals, though it is currently expected that the refresh report will be published around September 2011 (with internal conclusions ready in July) and any workstream 3 output to be delivered in First Quarter of 2012

- ENSG has noted the interdependency with the work of the OTCG and the need to ensure that both Groups engage effectively. Several members of the ENSG participate in the OTCG. ENSG has also identified the need for emerging outputs from the OTCG work to feed into the ENSG Vision refresh, and for sharing of information between the scenarios to be used for ENSG workstreams 1 and 3.

North Seas Countries' Offshore Grid Initiative (NSCOGI)

- The UK, Germany, France, Belgium, Netherlands, Sweden, Ireland, Luxembourg, Denmark and Norway signed an MoU in December 2010 launching the NSCOGI.
- The aim is for governments to work together over the next two years, with energy regulators, the Commission and industry, to identify the cost and benefits of, and tackle the technical, regulatory, market and planning barriers to, different approaches to co-ordinated development of offshore grids in the North and Irish Seas, against the background of an expected sharp growth in offshore renewable generation.
- Detailed work will be carried out in three working groups:
  1. grid configuration and integration;
  2. market and regulatory issues; and
  3. planning and authorisation procedures.
- DECC's Future Electricity Networks represents the UK at the grid configuration working group, and is currently working on baseline generation scenarios used as basis for analysis.
- An interim report will be published in summer 2011, and the final report end 2012

DEPARTMENT OF ENERGY & CLIMATE CHANGE

4. The 2nd OTCG Expert Group meeting

Discussion Session 1: Identifying the key steps in the process for delivery of offshore transmission assets.

- The expert group identified the high level process steps required to deliver a project and then discussed which elements of the development process were critical to keeping the option of delivery of coordinated asset open.

- The expert community noted that different levels of co-ordination investments were possible:

1. Larger cables that current demand requires.
2. Between on and offshore grids (reducing onshore constraints)
3. Additional connection (redundancy) between assets within a ‘zone’
4. Additional connection (redundancy) between assets in separate ‘zones’
5. Assets providing connection with other countries

Discussion Session 2: Identifying the critical elements to enable coordination

- **Risk allocation**: Different parties could take on different risks at various stages in the development process. – but it was felt critical that the project is well defined at an early stage.

- **Standardisation** – of technical standards as well as voltages and control. Risk of creating sub-optimal solution/de facto standards.

- **Planning and consenting** – importance of developing a "needs case". Which party has responsibility for which aspects? First mover risk. The best technical design and cheapest option may not be most suitable for achieving consent.

- **Developments in technology** – need for developers to factor flexibility into projects to allow for technological advancement.

- **Future-proofing –** The expert group noted that defining a 'narrow project' could limit flexibility for future expansion in capacity. They noted the importance of building space into platforms (and other equipment) and consenting wider route corridors to allow for future expansion.

DEPARTMENT OF ENERGY & CLIMATE CHANGE

5. Commercial Perspectives

SCOTTISHPOWER
RENEWABLES

3rd OTCG meeting: Developers' commercial drivers & Regulatory measures

Allan Kelly – OTCG Offshore Wind Developer Sub-group Nominee
Regulatory Policy Manager
ScottishPower Renewables
24 May 2011

Outline

SCOTTISHPOWER RENEWABLES

- Iberdrola & ScottishPower Renewables
- Context
- Key Commercial and Regulatory drivers
- Regulatory measures

Iberdrola & SPR

Iberdrola Renovables

- World's No.1 wind operator - 13,000 MW installed
- More than 55,000 MW in development
- €9bn invested over 3 year period

ScottishPower Renewables

- Largest UK onshore developer – ~1000 MW operating
- 169 employees, growing rapidly
- £1bn invested in Scotland over past 10 years
- West of Duddon Sands (389MW), East Anglia (7,200MW), Argyll Array (1,800MW)
- Grid agreements signed, including 7200MW for EA
- Investing c.£100m in Zone/ projects development pre consent

Context – DECC/Ofgem

SCOTTISHPOWER RENEWABLES

Asset delivery expert workgroup =>

- Design initial project assets to enable successive project connections (e.g. extra platforms);
- Pre-engineering works (e.g. landing points) that anticipate future projects;
- 'Strategic' investment - assets that would benefit the grid overall (e.g. cables between zones).

On this basis, what are the key commercial drivers and realities facing developers for designing regulatory options to deliver such assets?

Additional regulatory measures needed to deliver such assets and how to ensure they are consistent with project investor/lender requirements and likely to lead delivery of assets at lowest cost?

Commercial drivers and realities

SCOTTISHPOWER RENEWABLES

Developers and investors need certainty and confidence:

- existing grid arrangements must not be adversely affected;
- consistency with relevant existing offshore grid and onshore grid arrangements
- timely – as soon as possible and ongoing
- predictable, transparent, stable

Recognise commercial realities facing developers:

- balance sheet and project investors' perceptions of regulatory risk
- project risk:
  - project certainty Vs grid investment decision
- User commitment (financial security):
  - investment decision Vs responsibility for security, especially if 'strategic' investment
- transmission charging:
  - predictable, transparent, stable
  - reasonable and fair in dealing with 'strategic' investment

Regulatory measures (1/3)

SCOTTISHPOWER RENEWABLES

Shared understanding of meaning of 'co-ordinated offshore network':

- high level 'straw man' design by consultants? Academics?
- focus on R3?
  - initially, then widen without compromising current projects?

Central planning, design and co-ordination role:

- efficient – minimise interfaces
- framework
- incentives
- Europe model?

Incentivise participants:

- benefits to developers

Timely:

- prize reduces as development and implementation phases progress
- clarity and certainty needed as early as possible

Regulatory measures (2/3)

SCOTTISHPOWER RENEWABLES

Developed by 'experts':

- experienced in existing Regulatory frameworks
- focused, facilitated workgroups to consider 'straw man'
- input from those exposed to costs and risk

Communication – investor and stakeholder perceptions need to be managed carefully

Transmission charging:

- consistent, stable and predictable
- who pays for anticipatory investment and pre-engineering work?
- recognise 'strategic' investment
- consistent with Europe

User commitment:

- recognise considerable 'at risk' investment made by developers
- value at risk – CMP 192

Regulatory measures (3/3)

SCOTTISHPOWER RENEWABLES

Delivery framework:

- anticipatory and pre-engineering works:
  - responsibility for delivering works required by multiple users
  - reliance on works (delivered by others) requires absolute clarity and certainty
  - incentives?
- asset delivery:
  - OFTO type arrangement?
  - developer involvement (timing, tender process etc)
  - incentives?

Cross policy issues:

- Consents:
  - 'consentability' of infrastructure
  - framework that will facilitate developer and infrastructure project

Role of Regulator

Transmission Capital

Offshore Transmission Co-ordination Group

OFTO views

Chris Veal

24th May 2011

Key commercial drivers and realities facing OFTOs

What are the key commercial drivers and realities facing OFTOs that need to be taken into account when designing regulatory options to deliver assets that anticipate future projects or would not directly benefit any one developer but be good for the grid overall?

- **Key OFTO drivers:**
  - Understand risk
  - Allocate risk to party best placed to manage it
  - Price risk that resides with OFTO through contingencies and downside sensitivity analysis
  - Financial structure must remain robust under all credible scenarios

- **What risk is OFTO being asked to take?**
  - Depends of Early v Late OFTO appointment (see next slide)
  - Not all risks can be priced as above, some will fall outside of investors remit

- **Relevant issues for co-ordination**
  - Is OFTO specifying the outline design?
  - Is OFTO carrying out the development?
  - Assume OFTO is doing detailed design, procurement and construction

- **Will OFTO build assets at risk under the current OFTO model?**
  - What is the incentive?
  - What is downside risk? Is it limited?
  - Will it lead to greater chance of winning?
  - Is the risk allocated to the best party to manage it?

OFTO views on Early v Late OFTO appointment

- **Early v Late appointment**
  - Difficult to see how an OFTO can bid a fixed price on an early OFTO appointment:
  - How to deal with development risk? Both costs and timing.
  - How to deal with availability of finance 3-4 years ahead of spend?
  - Therefore OFTO view that Late appointment works best
  - There may be an option for Early OFTO appointment but will require a different regulatory model
- **OFTOs favour Late OFTO appointment**

Consequences of Late OFTO appointment

What are your views on any additional regulatory measures needed to deliver such assets, and how should they be designed to ensure they are consistent with project investor/lender requirements and likely to lead delivery of assets at lowest cost?

- **Consequences of a Late OFTO appointment:**
  - OFTO not carrying out land right acquisition or permitting
  - But happy to have land rights and consents transferred from developing party
  - Rights should not favour an OFTO or a class of OFTOs
- **For Late OFTO appointment**
  - Decisions on many co-ordination issues probably taken ahead of OFTO appointment
  - OFTO is left with more minor decisions
- **OFTOs unlikely to spend more than the minimum unless**
  - Chance of bid success is increased
  - Downside risk is limited
- **So if more-than-minimum works are to be carried out there needs to be either:**
  - An independent design authority who can require that OFTOs build more than the minimum ; or
  - Ofgem set bid evaluation criteria so that they are encouraged to do so (perhaps based on independent design authority's recommendation)

Additional regulatory measures needed

- **Independent Design Authority needed to:**
  - Specify outline design
  - Specify any requirements for 'any spare' capacity or inter project cables
- **Independent Developer needed to:**
  - Obtain permits and land rights
- **"Independent" means independent of OFTO bidding process**
- **Could be:**
  - NETSO (with appropriate business separation measures)
  - Onshore TO (in respect of Developer with appropriate business separation measures)
  - Generator
  - A combination of the above
- **A requirement of the independent party (ies) is that it needs to ensure that:**
  - There are not any OFTO risks that are incompatible with non-recourse project finance
  - The design does not favour particular manufacturers

For more information contact:
Chris Veal
+44 7768 036613

DEPARTMENT OF ENERGY & CLIMATE CHANGE

6. Wrap up

Next steps

- **Homework**
  - Following today's discussion the Secretariat will be circulating an agreed list of actions for the group.

- **Meeting minutes**
  - To be published two weeks today. OTCG will be given 5 days to provide any comments on a draft version.

- **Next meeting dates** - dates for OTCG meetings:
  - 05/07
  - 18/08
  - 29/09

- **Expert workshop dates:**
  - 17 June
  - 21 July
  - 7 September